REMARKS

The foregoing amendments and these remarks are in response to the Final Office Action dated April 1, 2010. This amendment is timely filed, and is accompanied by a Request for Continued Examination.

At the time of the Office Action, claims 1-15 were pending. In the Office Action, claims 1-15 were also rejected under 35 U.S.C. §103(a). The rejections are discussed in more detail below.

I. Rejections based upon art

Claims 1-15 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Lackey et al. article (hereafter "*Lackey*") in view of U.S. Patent No. 5,021,350 to Jung et al. ("*Jung*") and U.S. Patent No. 4,138,292 to Chibata et al. ("*Chibata*") and U.S. Patent No. 3,791,927 to Forgione et al. ("*Forgione*"). Applicant submits the claims are patentable over these references.

A main difference between the method of claim 1 and that of *Lackey* is that *Lackey* isolates colonies and discards the culture medium. To the contrary, the present method of claim 1 relates to maintenance of colonies in their culture medium. This approach is achieved through the use of a pellet, which is to be used as a phytosanitary agent in soil, because it helps keep the microorganism viable during storage and it enables the fungi to start growth readily, as soon as it is dispersed in soil and it encounters the temperature and humidity conditions suitable for growth.

The need for the inclusion of the culture medium in the pellet is by-passed in *Lackey* by the use of very dry pellets (removal of water up to 95-98%). The pellets of *Lackey* keep for up to 84 days at 22 °C (page 156, second column, under the heading "Effect of soil heating and soil water") although it was preferred to store them at 5 °C, where it was found that the efficacy remained high after 28 days (page 159, first column, last three lines).

For the foregoing reasons, a person of ordinary skill in the art starting from *Lackey* would not have looked to *Jung*. Even if such action was taken, the subject matter of claim 1 would not be achieved through a combination of *Lackey* with *Jung*. *Jung* does not teach that the culture medium should be included in the pellet to lengthen the storage time of the pellet. It would not have been obvious to recover the fungus so as to simplify the method and provide nutrients, in the absence of

any teaching in that direction. Therefore, the skilled person combining the two cited documents would not have made changes to the *Lackey* method that would have led to the presently claimed method. Quite to the contrary, as *Jung* teaches that it is advantageous to dry the gel (column 5, lines 15 to 17), if anything, the skilled person would have tried to achieve an even drier pellet than that of *Lackey*, and not a less dry one as produced by the presently claimed method.

Jung also states that ordinary drying gives a film that crumbles easily and can be crushed without difficulty (column 5, lines 16-20). To solve this problem, *Jung* adds an adsorbent surface (column 5, lines 20-25), which only achieves up 50% water loss. *Jung* does not teach how to achieve higher water loss. Therefore, the skilled person looking into this document and following its teachings, would not have been able to arrive at the intermediate moisture content of the present application.

In the light of the amendment made to claim 1 concerning the composition of the incubation medium, it is even clearer that none of the cited documents anticipate or point towards the claimed method.

The documents by *Chibata* and *Forgione* are not particularly pertinent to the present claims. They both deal with a different technical problem, and refer to enzyme and/or microorganism encapsulation, and to the maintenance of the enzymatic activity of enzymes and microorganisms, not the maintenance of the viability/spore formation of the fungi, as per the present invention. Moreover, in the light of the amendments that have been introduced to claim 1, narrowing down the fungi to the Moniliales family, these two latter documents are even less relevant.

New claims 16 and 17 are added herein, in which the composition of the culture media may include cornflour and sucrose, and in which the produced granules are suitable for use as phytosanitary agents for use in soil. Cornflour and sucrose are particularly advantageous in view of the function of the pellets of the application, which is that of being a phytosanitary agent for use in soil. Cornflour has an advantageous function in the growth of the fungi of the claimed family, in particular *Arthrobotrys*. It favors the formation of traps for the mycelia, which is the main reason for using this fungus in this context. The inclusion of cornflour in the pellets makes the fungus active straight away from the first moment it starts growing on the soil. Sucrose, as well as

providing nutrition to the fungus, stabilizes the cell membrane thus preserving the integrity of the fungi during the dry stage.

Example 3 of the present application describes the preparation of pellets comprising cornflour and sucrose. In this embodiment, the dry granules keep for three months at room temperature. At the end of the storage period, the average number of surviving propagules is equal to 100% of that determined after granule formation. Also, the fungus is particularly effective in combating nematodes because the fungus develops a greater number of traps against them. By contrast, in the embodiments of Examples 1 and 2 of the present application, which did not include both sucrose and cornflour, the average number of surviving propagules was 50 and 90% respectively, thus exhibiting a satisfactory but less optimal performance.

The composition of the culture medium, in particular with the inclusion of cornflour and sucrose, is such that it provides a "booster" to growth, once it is dispersed on the soil. Due to these two ingredients, the method of this embodiment is capable of making the pellets more efficient and effective upon use, and the pellets thus obtained are, as a consequence, improved with respect to the prior art.

Independent claim 1 is thus patentable over the cited prior art for the foregoing reasons. The dependent claims are also believed allowable because of their dependence upon an allowable base claim, and because of the further features recited.

II. Conclusion

Applicant has made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicant respectfully requests reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

Date: July 1, 2010

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